

L Number	Hits	Search Text	DB	Time stamp
1	2	("6158650").PN.	USPAT; EPO; JPO; DERWENT; USOCR USPAT	2003/03/24 07:59
2	13	("5046415" "5155895" "5395040" "5460316" "5492266" "5505367" "5535936" "5681387" "5804248" "5813331" "5825629" "5921462" "5934545").PN.	USPAT	2003/03/24 07:55
3	811	parallel near circuit near board	USPAT; EPO; JPO; DERWENT; USOCR	2003/03/24 08:02
4	213	parallel near circuit near boards	USPAT; EPO; JPO; DERWENT; USOCR	2003/03/24 08:02
5	212	parallel adj circuit adj boards	USPAT; EPO; JPO; DERWENT; USOCR	2003/03/24 08:03
6	46	(parallel adj circuit adj boards) and solder	USPAT; EPO; JPO; DERWENT; USOCR	2003/03/24 08:23
7	13	("3745512" "4284311" "4682833" "4917614" "5037316" "5122066" "5306168" "5410258" "5443398" "5545051" "5556286" "5591941" "5593322").PN.	USPAT	2003/03/24 08:07
8	12	5876219.URPN.	USPAT	2003/03/24 08:10
9	186	174/\$.ccls. and interposer	USPAT; EPO; JPO; DERWENT; USOCR	2003/03/24 08:26
10	52	(174/\$.ccls. and interposer) and (through adj hole)	USPAT; EPO; JPO; DERWENT; USOCR	2003/03/24 08:26
11	43	((174/\$.ccls. and interposer) and (through adj hole)) and solder	USPAT; EPO; JPO; DERWENT; USOCR	2003/03/24 09:08
12	11	("5477933" "5483421" "5598036" "5659203" "5834848" "5973406" "5973930" "6163462" "6177728" "6177731" "6191952").PN.	USPAT	2003/03/24 08:28
13	23	("4814855" "5121299" "5191174" "5239448" "5306546" "5316788" "5373627" "5468681" "5477082" "5479703" "5504035" "5583321" "5591941" "5633533" "5637832" "5675889" "5715144" "5764485" "5773884" "5784262" "5796589" "5812378" "5999415").PN.	USPAT	2003/03/24 08:31
14	3	("4642889" "5218761" "5258648").PN.	USPAT	2003/03/24 08:36
15	22	5491303.URPN.	USPAT	2003/03/24 08:36
16	5	("3971610" "5477933" "5483421" "5491303" "5531021").PN.	USPAT	2003/03/24 09:03
17	3	("4642889" "5218761" "5258648").PN.	USPAT	2003/03/24 09:03
18	22	5491303.URPN.	USPAT	2003/03/24 09:04
19	5	("4770641" "5474458" "5491303" "5969952" "6404043").PN.	USPAT	2003/03/24 09:04
20	464	(174/263).CCLS.	USPAT; EPO; JPO; DERWENT; USOCR	2003/03/24 09:16

21	43751	(insulative or insulating or insulation) adj (substrate or interposer)	USPAT; EPO; JPO; DERWENT; USOCR	2003/03/24 09:17
22	220	((insulative or insulating or insulation) adj (substrate or interposer)) and (plated adj through adj hole)	USPAT; EPO; JPO; DERWENT; USOCR	2003/03/24 09:19
23	149	((((insulative or insulating or insulation) adj (substrate or interposer)) and (plated adj through adj hole)) and (solder or (solder adj ball))	USPAT; EPO; JPO; DERWENT; USOCR	2003/03/24 09:20
24	6	("3576941" "4470195" "5030137" "5428190" "5949657" "RE36845").PN.	USPAT	2003/03/24 09:22
25	13	("4202007" "4598167" "4912603" "4927983" "5001605" "5097593" "5264325" "5424492" "5439766" "5451721" "5477933" "5487218" "5490040").PN.	USPAT	2003/03/24 09:25

United States Patent [19]
MacKay

[11] **Patent Number:** 4,862,588
[45] **Date of Patent:** Sep. 5, 1989

[54] **METHOD OF MAKING A FLEXIBLE INTERCONNECT**

- [75] **Inventor:** Colin A. MacKay, Austin, Tex.
[73] **Assignee:** Microelectronics and Computer Technology Corporation, Austin, Tex.
[21] **Appl. No.:** 222,487
[22] **Filed:** Jul. 21, 1988
[51] **Int. Cl.⁴** H01R 13/24
[52] **U.S. Cl.** 29/884; 29/854
[58] **Field of Search** 29/854, 857, 847, 874, 29/884

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Primary Examiner—Timothy V. Eley
Attorney, Agent, or Firm—Fulbright & Jaworski

[57] **ABSTRACT**

A method of making a flexible interconnect for connection between stacks of electronic components. The method includes punching a plurality of holes through a flexible insulating material, plating copper studs into the holes extending out of at least one side and preferably both sides of the flexible material, and electrically interconnecting some of the plated studs by interconnects supported by the flexible material. The interconnects may be supported from the outside of the flexible material or embedded therein. Dummy studs may be provided in the flexible material extending to the outside and aligned with studs extending on the other side of the insulating material which are connected to the electrical interconnects.

7 Claims, 4 Drawing Sheets

